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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/757,287	01/14/2004	Stephen Oser	35015US1	4506

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EXAMINER

CASTELLANO, STEPHEN J

ART UNIT	PAPER NUMBER
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3781

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/26/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/757,287

Applicant(s)

OSER ET AL.

Examiner

Stephen J. Castellano

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

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The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 12-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Re claim 12, the specification states the intended use of the elements enabling their interlocking. Re claim 13, it can't be determined that the mirror image elements are the moveable elements since it could be the non mirror image element that is movable with respect to two stationary mirror image elements. Re claim 14, the original disclosure doesn't indicate rotation or pivoting. **This is a new matter rejection.**

Note that parts 105A and 105C are not actually identical but are similar and resemble mirror image parts. The specification sets forth that each of the three interlocking elements may be characterized by an identical shape. The shape of each element is identical to the others when this limitation is read in light of the specification.

The specification states that "the retainer ring 100 is made of at least two arced elements that are movable relative to each other ..." There is no identification of which two parts or elements (105A, 105B or 105C) are movable with respect to each other.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 5, 7, 8 and 10-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Darby et al. ('411) (Darby).

Darby discloses an end closure assembly for a pressure vessel, comprising a head member (domed shaped element 39, tubular connector 55 and seal 57 made of elastomeric non-metallic material), a retainer ring (79 which can be made of fiber composite) and a securing plate (face plate 41).

The retainer ring (79) is one-piece and consist of three layers coiled and laying on top of each other and is considered to have at least two arced elements that are movable by rotation with respect to each other, a first element could be the topmost 1/3 circle portion of the ring and a second element could be the lowermost 1/3 circle portion of the ring, the middle portion representing approximately 2 1/3 revolutions would represent a movable part allowing rotation about a horizontal axis much like a coil spring. Therefore, the first and second elements are movable relative to each other.

The retainer ring could also be a segmented ring as stated in col. 8, line 65. The segmented ring would certainly have arced elements movable relative to each other as evidenced by Buckley (3136230).

Re claims 7, 8 and 12-14, the elements are similar is shape, identical in shape insofar as the specification uses the word "identical," the elements are interlocked and linked, the elements are mirror images of each other and the elements rotate relative to each other.

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 5, and 7-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Darby.

Darby discloses the invention except for all of the parts of the head member being non-metal. The Official notice taken in the Office action mailed July 19, 2006 that domed heads and tubular connectors of non-metal composite plastic material are well known has not been challenged. Therefore, the previous prior art admission is now being treated as admitted prior art. It would have been obvious to use non metal plastic components where corrosion and weight are of concern.

Claims 1, 4, 5 and 7-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Darby in view of Brock.

This rejection is made if it is deemed that Darby doesn't disclose two arced elements movable relative to one another.

Brock teaches various retaining rings 10 with two arced elements 13 movable relative to each other as a hinge is apparent at the attachment of each limb 13 to a spoke 12 (see Fig. 1 which details the deformation of limb 13 in phantom and Fig. 7 an embodiment with a central opening. It would have been obvious to replace the retaining ring of Darby with the retaining ring 10 of Brock to provide a readily deformable ring which transforms from a conical or

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deformed configuration to a flattened configuration in gripping engagement (see col. 1, first paragraph).

Claims 1, 4, 5 and 7-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Darby in view of Buckley.

This rejection is made if it is deemed that Darby doesn't disclose two arced elements movable relative to one another.

Buckley teaches a retaining ring 28 with two arced elements 30 and 32 movable relative to each other. It would have been obvious to replace the retaining ring of Darby with the retaining ring 28 of Buckley to provide easier assembly and disassembly (see Buckley col. 1, lines 29-31).

The elements are identical in shape insofar as similar elements are deemed identical in the present application. The elements are interlocked and linked, are mirror images of each other and rotate relative to each other insofar as these limitations were originally disclosed.

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Darby or [Darby in view of Brock] or [Darby in view of Buckley] in view of Galasso et al. (Galasso).

Galasso discloses the invention except for the elliptical head member. Galasso teaches an elliptical (insofar as elliptical is shown) head member (160) in contact with an universal head member (140) and a securing plate (110). It would have been obvious to add an elliptical head member to take up the space between an universal head member and a securing plate to provide a tight fit and to properly support the parts within the assembly so that these parts do not deform in the presence of excessive force or pressure.

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Applicant's arguments with respect to claims 1-5 and 7-14 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).


Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Castellano whose telephone number is 571-272-4535. The examiner can normally be reached on increased flexibility plan (IFP).

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Stephen J. Castellano
Primary Examiner
Art Unit 3727

sjc